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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

Application Number: 10/714,122  
Filing Date: November 14, 2003  
Appellant(s): KRYKA ET AL.

SEP 01 2007

*Technology Center 2100*

Jeremy J. Curcuri (Reg. No. 42,454)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed on 8/6/07 appealing from the Office  
action mailed on 3/8/07.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

U.S. Patent Application Serial No. 10/714,121

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

|              |                 |        |
|--------------|-----------------|--------|
| 2004/0015566 | ANDERSON et al. | 1-2004 |
| 6,684,204    | LAL             | 1-2004 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 49 of co-pending Application No. 10/714,121. Although the conflicting claims are not identical, they are not patentably distinct from each other because of following reasons:

Claim 49 of Patent Application No. 10/714,121 contain(s) every element of claims 1 and 5 of the instant application and thus anticipate the claim(s) of the instant application. Claims of the instant application therefore are not patently distinct from the earlier patent claims and as such are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. *In re Longi*, 759 F.2d at

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896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a 35 patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "**anticipated**" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S. Publication No. 2004/0015566) in view of Lal (U.S. Patent No. 6,684,204).

With respect to claim 1, Anderson teaches a document processing system having at least one computer running system software that interfaces with transport hardware to provide document control and capture document images and document data in various formats (sections 60-69), wherein an image file stores a plurality of captured document images (i.e., an item having images and data, such as MICR data (account numbers, check numbers, etc., section 65), for one document (section 62) and/or a image database/cycle file storing images and associated information, such as MICR information (section 65), (sections 195 and 208, "<cycle>" in Table 8 on page 24, and "Database" and "Cycle" in Table 62 on page 42, wherein database and cycle are manipulated, such as deleting and migrating, by the file management, sections 308-320) for subsequent retrieval on an individual basis (i.e., capturing any object into any database on either a collective basis or an individual object basis (section 120) and searching the system indexes on the basis of an individual object attribute or combination of object attributes (section 130), wherein the object teaches an image ("Storage and retrieval of objects (images)" in Table 1A on page 4)), the system

including a computer readable storage medium storing the system software (sections 69-73). Anderson teaches instructions for indexing the image file by creating an index file containing indexing data for the captured document images (i.e., a captured items index (section 131) and/or a database index (sections 787 and 788)). Anderson teaches data for the captured document images are in XML (sections 1089-1092 and 1107). Anderson does not explicitly disclose the index file being in the form of a self-describing document. However, Lal teaches the index file being in the form of a self-describing document wherein elements describe the indexing data for the documents to allow subsequent retrieval of the document on an individual basis (i.e., two types of indexes (a hash table index and a tree index) generated based on XML documents and a DTD file (fig. 3, fig. 5, fig. 7, lines 64-9 in cols. 4-5, and lines 1-49 in col. 2) and the indexes contain XML tags and reflect the basic structure of the XML document and the DTD associated with the XML document (lines 17-35 in col. 5, lines 30-38 in col. 4, fig. 8, and fig. 9)) in order to effectively search data in XML (lines 31-49 and lines 60-64 in col. 2). Therefore, based on Anderson in view of Lal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Lal to the system of Anderson in order to effectively search data in XML.

With respect to claims 2-4, Lal teaches wherein the index file follows a predetermined set of rules for making the index valid, the predetermined set of rules is set forth in a document type definition, and the index file is in accordance with extensible markup language (XML) (i.e., two types of indexes (a hash table index and a tree index) generated based on XML documents and a DTD file (fig. 3, fig. 5, fig. 7, lines



64-9 in cols. 4-5, and lines 1-49 in col. 2) and the indexes contain XML tags and reflect the basic structure of the XML document and the DTD associated with the XML document (lines 17-35 in col. 5, lines 30-38 in col. 4, fig. 8, and fig. 9)). Therefore, the limitations of claims 2-4 are rejected in the analysis of claim 1 above, and these claims are rejected on that basis.

The limitations of claims 5-8 are rejected in the analysis of claims 1-4 above respectively, and these claims are rejected on that basis.

The limitations of claims 9-12 are rejected in the analysis of claims 1-4 above respectively, and these claims are rejected on that basis.

With respect to claim 13, Anderson teaches capturing image data in an imaging subsystem of the document processor (sections 60-69). Anderson teaches indexing the captured image data by creating an index file containing indexing data for the captured image data (i.e., a captured items index (section 131) for an item having images and data, such as MICR data (account numbers, check numbers, etc., section 65), for one document (section 62) and/or a database index for image data, such as the image location, MICR data, and any other data associated with the image (sections 787 and 788)) to allow subsequent retrieval of the captured image data on an individual basis (i.e., capturing any object into any database on either a collective basis or an individual object basis (section 120) and searching the system indexes on the basis of an individual object attribute or combination of object attributes (section 130), wherein the object teaches an image ("Storage and retrieval of objects (images)" in Table 1A on page 4)). Anderson teaches data for the captured document images data are in XML

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(sections 1089-1092 and 1107). Anderson does not explicitly disclose the index file being created in accordance with a document type definition file. However, Lal teaches indexing of XML data, wherein an index file being created in accordance with a document type definition file (i.e., two types of indexes (a hash table index and a tree index) generated based on XML documents and a DTD file (fig. 3, fig. 5, fig. 7, lines 64-9 in cols. 4-5, and lines 1-49 in col. 2) and the indexes contain XML tags and reflect the basic structure of the XML document and the DTD associated with the XML document (lines 17-35 in col. 5, lines 30-38 in col. 4, fig. 8, and fig. 9)) in order to effectively search data in XML (lines 31-49 and lines 60-64 in col. 2). Lal also teaches establishing a document-type definition file that sets forth a set of rule for creating a valid index file in the form of a self-describing document, the document type definition file declaring a plurality of elements for describing indexing data (fig. 5 and lines 18-30 in col. 2). Therefore, based on Anderson in view of Lal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Lal to the system of Anderson in order to effectively search data in XML.

With respect to claim 14, Lal teaches the plurality of element declarations includes first elements related to selected parameters of the document processing system and second elements related to selected parameters of each document that is processed (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5). The limitations of claim 14 are rejected in the analysis of claim 13 above, and the claim is rejected on that basis.

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With respect to claim 15, Anderson teaches storing the image data and associated index file in storage means of the document processor (sections 60-69 on pages 2-3, sections 85-97 on pages 6-7, section 131 on page 9, and sections 238-245 on pages 14-15).

With respect to claims 17-18, Lal teaches the document-type definition file includes a plurality of attributes associated with selected ones of the plurality of elements, the association being set forth in an attribute declaration list and the document-type definition file is created in accordance with extensible markup language (XML) (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5). The limitations of claims 17-18 are rejected in the analysis of claim 14 above, and these claims are rejected on that basis.

#### **(10) Response to Argument**

A. The applicants argue that *Anderson fails to describe an index file indexing an image file that stores a plurality of captured document images for subsequent retrieval on an individual basis.*

The examiner respectfully traverses.

Anderson teaches an index file (i.e., a captured items index (section 131) and/or a database index (sections 787 and 788)) indexing an image file that stores a plurality of captured document images (i.e., an item having images and data, such as MICR data (account numbers, check numbers, etc., section 65), for one document (section 62) and/or a image database/cycle file storing images and associated information, such as

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MICR information (section 65), (sections 195 and 208, "<cycle>" in Table 8 on page 24, and "Database" and "Cycle" in Table 62 on page 42, wherein database and cycle are manipulated, such as deleting and migrating, by the file management, sections 308-320) for subsequent retrieval on an individual basis (i.e., capturing any object into any database on either a collective basis or an individual object basis (section 120) and searching the system indexes on the basis of an individual object attribute or combination of object attributes (section 130), wherein the object teaches an image ("Storage and retrieval of objects (images)" in Table 1A on page 4)). The captured items index and/or the database index is the result of indexing the item and/or the image database/cycle file. Anderson teaches index is for query and retrieval (section 131).

Thus, Anderson teaches index file indexing an image file that stores a plurality of captured document images for subsequent retrieval on an individual basis.

Furthermore, Lal also teaches index file indexing documents data for subsequent retrieval on an individual basis. Lal discloses index is for query and retrieval (lines 40-46 in col. 5). In an example of finding all documents authored by Albert Einstein in Lal (lines 14-26 in col. 6), a listing of documents comprising information only related to Albert Einstein as an author is resulted based on an <author> tag of the index (lines 10-46 in col. 5). In another example of finding the cheapest book titled "An Introduction to XML" in Lal (lines 27-49 in col. 6), the search engine will list the prices of each of the books entitled "An Introduction to XML" based on <title> tag and <price> tag of the index (lines 10-46 in col. 5). Thus, searching documents based on a tag, such as <title>

tag, of the index teaches retrieving documents on an individual basis. Therefore, the index of documents is for document retrieval on an individual basis. Thus, Lal also teaches index file indexing documents data for subsequent retrieval on an individual basis.

Therefore, the applicants' argument is not persuasive.

**B. The applicants argue that *Anderson fails to describe an index file indexing an image file that stores a plurality of captured document images for subsequent retrieval on an individual basis, let alone describe an index file in the form of a self-describing document.***

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). An index file in the form of a self-describing document is further discussed below in paragraph C.

**C. The applicants argue that *Lal does not appear to offer any discussion of an index file in the form of a self-describing document.***

The examiner respectfully traverses.

Lal discloses XML tags as being metadata, wherein the metadata is information about information (lines 30-32 in col. 4). For example, <author> tags tells that data

within the tag, that is <author>...</author>, will be an author's name (lines 30-38 in col. 4 and line 62 in col. 1 thru line 18 in col. 2). Thus, the XML tags are self-describing. Therefore, a XML document containing the XML tags teaches the XML document being in the form of a self-describing document.

Lal discloses that a Document Type Definition (DTD), which is used to specify a schema/data structure of XML data, includes the XML tags (fig. 5 and lines 19-30 in col. 2). Thus, the DTD is in the form of a self-describing document.

Lal discloses two types of indexes (a hash table index and a tree index) generated based on XML documents and a DTD file (fig. 7 and lines 64-9 in cols. 4-5). Lal discloses that the indexes contain XML tags and reflect the basic structure of the XML document and the DTD associated with the XML document (lines 17-27 in col. 5, fig. 8, and fig. 9). Thus, the indexes are in the form of a self-describing document.

Therefore, Lal teaches an index file in the form of a self-describing document in accordance with the document-type-definition file.

In response to the applicants' further argument that the indexes are certainly not a document let alone the fact that the claims specifically require a self-describing document, the examiner respectfully traverses that the claims merely recite the index file being in the **form** of a self-describing document. As discussed above, since the indexes of Lal contain XML tags that are self-describing and reflect the basic structure of the XML document and the DTD associated with the XML document, Lal teaches an index file in the form of a self-describing document.

In response to applicant's arguments, that indexes of Lal are not index files that index image files containing multiple document images, against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Therefore, the applicants' arguments are not persuasive.

D. The applicants argue that *there is no motivation to combine the references to achieve the claimed invention.*

The examiner respectfully traverses.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Anderson discloses an electronic item management and archival system (abstract) where financial documents, such as checks, are scanned (sections 62 and 65). Images and associated information, such as MICR information, of the scanned financial documents are obtained and *indexed* as discussed above in paragraph A. Anderson also discloses

obtaining the associated information (i.e., check value, payee, date, check number, MICR information, etc.) as an XML file along with the images (sections 1089-1092 and 1107). Anderson does not explicitly disclose indexing of XML data.

Lal discloses dozens of application of XML already exist, including the Open Financial Exchange for exchanging financial data between banks or banks and customers (lines 31-44 in col. 2). Lal recognizes a problem that search engines are not able to effectively search data in XML (lines 39-41 in col. 2). Thus, Lal teaches *indexing of XML data*, wherein an index file is in the form of a self-describing document in accordance with the document type definition file as discussed above in paragraph C (figs. 4, 5, 7, and 9, lines 1-49 in col. 2, lines 30-38 in col. 4, line 64 in col. 4 thru line 35 in col. 5) in order to effectively search data in XML (lines 31-49 and lines 60-64 in col. 2). Therefore, based on Anderson in view of Lal, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Lal to the system of Anderson in order to effectively search data in XML.

"Test of obviousness is not whether features of secondary reference may be bodily incorporated into primary reference's structure, nor whether claimed invention is expressly suggested in any one or all of references; rather, **test is what combined teachings of references would have suggested to those of ordinary skill in art.**" In re Keller, Terry, and Davies, 208 USPQ 871 (CCPA 1981).

"Reason, suggestion, or **motivation to combine two or more prior art references** in single invention **may come from references themselves**, from **knowledge of those skilled in art** that certain references or disclosures in references



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are known to be of interest in particular field, or from nature of problem to be solved,"

Pro-Mold and Tool Co. v. Great Lakes Plastics Inc. U.S. Court of Appeals Federal

Circuit 37 USPQ2d 1626 Decided February 7, 1996 Nos. 95-1171, -1181.


Therefore, the applicants' argument is not persuasive.

**(11) Related Proceeding(s) Appendix**


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

Jh   
9/25/07

Conferees:

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